

R. PAUL SMITH POWER STATION

- Owned & operated by Allegheny Energy, Inc.
- Coal-fired boilers: (9) 1947, 34.5 MW; (11) 1958, 75 MW
- Coal ash impoundments discharge coal ash wastewater containing selenium, arsenic, and other metals into the Potomac River. Coal ash is transported to surface impoundments in West Virginia.
- The Maryland Department of the Environment (MDE) regulates air emissions, discharges from coal ash impoundments to Potomac River; West Virginia Department of Environmental Protection regulates surface impoundments

AIR EMISSIONS

| Pollutant | 2007 | | 2008 | | 2009 | |
|--|--------------|------------------|--------------|------------------|--------------|------------------|
| | Total (tons) | Per MWh (lbs/hr) | Total (tons) | Per MWh (lbs/hr) | Total (tons) | Per MWh (lbs/hr) |
| Sulfur Oxides (SO _x) | 5,536 | 16.69 | 3,699 | 15.81 | 964 | 15.08 |
| Nitrogen Oxides (NO _x) | 1,398 | 4.21 | 953 | 4.07 | 239 | 3.74 |
| Particulate Matter (PM ₁₀) | 204 | 0.62 | 115 | 0.49 | 64 | 1.00 |
| PM condensible | 243 | 0.73 | 163 | 0.70 | 41 | 0.64 |
| Carbon Dioxide (CO ₂) | 754,854 | 2275.71 | 527,631 | 2254.89 | 142,375 | 2227.24 |
| Hazardous Air Pollutants (lbs) | 262,136 | 0.40 | 220,087 | 0.47 | 55,008 | 0.43 |
| Mercury (lbs) | 82 | 0.00012 | 66 | 0.00014 | 4 | 0.00003 |

Source: Emissions – MDE Emissions Inventory, EPA Clean Air Markets Database, EPA Toxics Release Inventory; Megawatt Hours – Energy Information Administration

- MDE recently exempted R. Paul Smith from compliance with the Healthy Air Act, which sets strict emission limits for SO_x and NO_x from coal-fired power plants.
- The exemption allows R. Paul Smith to emit nearly 1,000 additional tons of NO_x and 3,500 additional tons of SO_x each year.
- SO_x exposure aggravates asthma, has been linked to other respiratory illness, and can react with other compounds to create small particles, which penetrate deeply into the lungs and can cause or worsen respiratory and heart disease.
- NO_x exposure irritates the lungs, lowers resistance to the flu, and can cause acute respiratory illness in children. In addition, NO_x contributes to ozone formation, which causes throat irritation, pain and burning in the chest, and shortness of breath.